Chapter 6 Selecting a Consultant/Developer/Partner

Contents:

List of Exhibits:

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This chapter provides a guide to selecting a consultant, turn-key developer, or partner.

The selection of a consultant or developer is a critical decision. The farm owner often relies on the consultant or developer to manage the process of transforming a feasible idea into a functioning facility. Some owners have the expertise, resources, and desire to lead the development effort on their own, but even in this case, choosing the right consultant can greatly improve the likelihood of project success. This chapter provides guidance to owners who are attempting to determine: (1) the role that they might take in the development process; (2) the right consultant to get the project developed, financed, and built; and (3) if an investment partner would be advisable.

From the owner's perspective, there are three general ways to structure the development of a biogas project:

1. **Owner-Builder.** Farm owner hires a consultant, plans and manages the design-construction effort, and maintains ownership control of the project. This approach maximizes economic returns to the owner, but also places most of the project risks on the owner (e.g., construction, equipment performance, financial performance).

2. **Purchase Turn-Key Project.** Owner selects a qualified development company to provide the owner with a "turnkey" digester plant, which is built by the developer but owned by the farm owner.

   The "turn-key" digester plant option requires expertise in developing the following 5 areas: (A) Digester; (B) Gas Handling; (C) Engines; (D) Utility Intertie; (E) Utility Rates

   Appendix I contains a list of vendors who provide the products and services applicable to a turn-key digester plant.

3. **Team With a Partner:** Owner teams with an equipment vendor, engineering/procurement/construction (EPC) firm or investor to develop the project and to share the risks and financial returns.

   A list of suppliers, vendors, and EPC firms is included in Appendix I.

With these structures in mind, a farm owner can determine his or her desired role in the project development process by considering two key questions:

- Should the owner self-develop, buy a turn-key project, or find a partner?

- If a partner is desired, what kind of partner best complements the owner and the project?

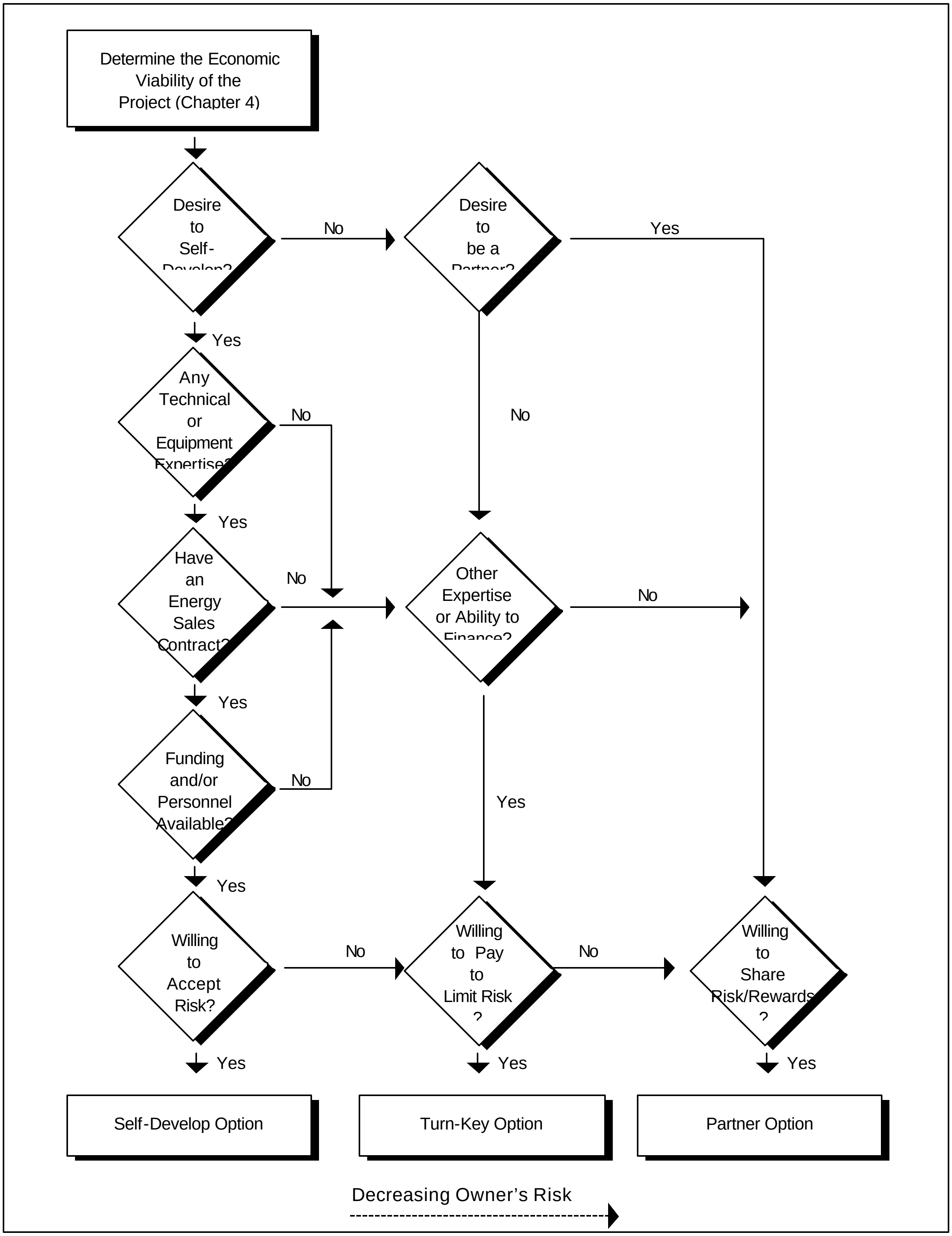
The owner can answer the first question by conducting a frank examination of his or her own expertise, objectives, and resources. The second question is more complicated because it entails an assessment of the owner's specific needs and a search for the right partner to complement those needs.

Exhibit 6-1 illustrates the process of determining the best development approach. As it indicates, in cases where the owner wants to be involved in the project development process, a number of issues must be considered. These issues are discussed in the following sections.

6-1. The Do-it-Yourself/Turnkey Decision

Before deciding whether to develop the project internally, the owner must understand the tasks involved in a project, which are outlined in Exhibit 6-2.

Exhibit 6-1 The Developer Selection Process



Next, an assessment of the owner's objectives, expertise, and resources determines whether or not the owner should undertake project development independently or try to find a turn-key developer. An owner with the following attributes is a good candidate for developing a project with a consultant alone:

- strong desire to develop a successful, profitable energy project;
- willingness to accept project risks (e.g., construction, equipment, permitting, financial performance);
- expertise with technical projects or energy equipment;
- high confidence level regarding biogas quantity and quality (i.e., modeling or testing have been completed);
- sufficient internal electricity demand or possession of a power sales agreement with a local electric utility or an electric consumer; and
- funds and personnel available to commit to the construction process.

Similarly, a strong desire for new business opportunities and/or visibility is beneficial. The type of owner that fits this profile is one who owns, operates, and fixes farm equipment.

If the owner is uncertain about several of the attributes listed above, particularly the desire to build, the willingness to take significant risks, and/or their level of technical expertise, then he or she might instead choose a turn-key builder. The following are several good reasons to develop the

Exhibit 6-2 Project Development Tasks

- Determine Biogas Supply If the owner has not already completed this step, then the first development step will be to determine the biogas supply using calculations, computer modeling, and/or testing.
- Scope Out the Project Project scoping includes early-stage tasks such as selecting a location for the equipment, sizing the energy output to the biogas supply, contacting the utility, and selecting key equipment.
- Conduct Feasibility Analysis Feasibility analysis includes detailed technical and economic calculations to demonstrate the technical feasibility of the project and estimate project revenues and costs.
- Select Equipment Based on the results of the feasibility analysis, primary equipment is selected and vendors are contacted to assess price, performance, schedule, and guarantees.
- Create a Financial Pro Forma A financial pro forma is usually created to model the cash flows of a project and to predict financial performance.
- Negotiate the Utility Agreement The terms of the agreement must be negotiated with the purchasing electric utility.
- Obtain Environmental and Site Permits All required environmental permits and site permits/licenses must be acquired.
- Gain Regulatory Approval Some power projects must obtain approval from state regulators or certification by the Federal Energy Regulatory Commission (FERC).
- Secure Financing All the tasks above are needed to determine economic viability to allow financiers to loan money for the project.
- Contract with Engineering, Construction, Equipment Supply Firms Firms must be selected and contracts and terms negotiated.

project with a turn-key builder:

- limited desire to lead the development effort;
- limited technical resources and/or experience;
- need to share or avoid specific project risks;
- difficulty financing the project alone;
- inability to dedicate personnel or time to the development effort;
- project development outside the scope of organization.

The questions in Exhibit 6-1 illustrate other critical considerations in making the owner-builder/turn-key decision. Most owners choose self build with consultant or turn-key options.

6-2. Selecting a Consultant/Consulting Firm

Once the decision to self build with a consultant has been made, the owner should review the capabilities of individual consulting firms that meet the owner's general needs. When selecting a consultant, there are several qualities and capabilities that owners should look for, including:

- previous biogas project experience;
- a successful project track record; and
- in-house resources (e.g., engineering, finance, operation) including experience with environmental permitting and community issues.

Information about individual firm qualifications can be gained from reports, brochures, and project descriptions, as well as from discussions with references, other owners, and engineers. Potential warning signs include: lawsuits, disputes with owners, lack of operating projects and failed projects (although a few failed efforts and/or underperforming projects can normally be found in the portfolio of any consultant). Published information can be obtained by researching trade literature, through legal information services, and through computer research services.

6-3. Selecting a Turn-Key Developer

Selecting a turn-key developer to manage the development process is a good way for the owner to shed development responsibility and risks, and get the project built at a guaranteed cost. In addition, the developer typically provides the owner with the strongest development skills and experience. Other reasons for selecting a turn-key developer include:

- the developer's skills and experience may be invaluable in bringing a successful project online and keeping it operational; and
- some developers have access to financing.

In return for accepting project risks, most turn-key projects cost more than self built systems. The turnkey option is a good approach if the owner does not want the risk and responsibility of construction. In a turnkey approach, the developer assumes development responsibility and construction risk, builds the facility, and then receives payment when the facility is complete and performing up to specifications. The turnkey approach enables each entity to contribute what it does best: the developer accepts development, construction, and performance risk; and the owner accepts financial performance risk.

6-4. Selecting a Partner

A partner reduces risks to the owner by bearing or sharing the responsibilities of project development, although the amount of risk reduction provided depends on the type of partner chosen.

Selecting a partner who is not a developer is a good choice if two key conditions exist:

1. The owner wants to keep management control of the project and has sufficient in-house expertise and resources to do so; and,

2. The partner can fulfill a specific role or provide equipment for the project.

In this case, the owner must have a clear desire to manage the development process and should have sufficient technical experience, personnel, and funds to support the effort. The owner should also have a relatively high confidence level regarding biogas production capability, as well as a willingness to accept a significant share of the project's risks (e.g., financial, environ-mental permitting, community acceptance).

There are 3 basic types of firms that may enter into partnership agreements with owners: equipment vendors, EPC firms (Engineering, Procurement, Construction), and investors. Each of these firms has different strengths and will assume different types of project risk. The key characteristics of these types of firms are summarized below.

— **Equipment Vendors.** Some equipment vendors such as engine manufacturers become partners in energy projects, including biogas projects, as a way to support the sale of equipment and services to potential customers. Equipment vendors may assist in financing the project, and may be willing to accept the equipment performance risk over a specified length of time for the equipment that they provide. However, equipment vendors typically do not take on responsibilities beyond their equipment services, and they generally want to recover their interest in a project as quickly as possible after the project has been built.

— **EPC Firms.** Similarly, some of the biogas EPC firms may become partners in biogas power projects with the objective of selling services and gaining a return on equity and/or time invested. However, this type of partner tends primarily to pursue large projects (i.e., >1 MW) where the EPC's strength as a manager of large, complex projects is more valuable.

— **Investment Firm.** Finally, an individual or investment company might become a partner in the biogas project if it has significant use for any available tax credits, or if the project has an attractive Rate of Return on investment.

6-5. Preparing a Contract

Once the firm has been selected, the terms of the agreement should be formalized in a contract. The contract should accomplish several objectives, including allocating risk among project participants. Some of the key elements of a contract are listed in Exhibit 6-3.

As Exhibit 6-3 indicates, contracting with a developer or partner in a biogas energy project can be a complex issue. Each contract will be different depending on the specific nature of the project and the objectives and limitations of the participants. Because of this complexity, the owner may wish to hire a qualified attorney to prepare and review the contract.

Exhibit 6-3 Elements of a Consultant Contract

The contract between the owner and the consultant, developer, or partner should describe in detail the responsibilities of each party, any payments to be made, and any warranties and/or guarantees. Some specific items that should be addressed include:

- Ownership shares
- Allocation of responsibility
- Decision-making rights
- Commitments of equity, financing, equipment, and/or services
- Payments, fees, royalties
- Hierarchy of project cash distributions
- Allocation of tax credits
- Allocation of specific risks (e.g., equipment performance, gas flow)
- Penalties, damages, bonuses
- Schedules and milestones
- Termination rights clause
- Buy-out price
- Remedies/arbitration procedures